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| 09/981,343 | 10/15/2001 | J Eric Mowat | 5693P005 | 5512 |
| 48102 | 7590 | 12/20/2007 | | |
| NETWORK APPLIANCE/BLAKELY 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040 | | | EXAMINER BILGRAMI, ASGHAR H | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/981,343 | Applicant(s) MOWAT, J ERIC | |
| | Examiner Asghar Bilgrami | Art Unit 2143 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6, 8-19, 21-37, 39-49, 51, 52 and 57 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8-19, 21-37, 39-49, 51, 52 and 57 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date: ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date: ____ | 6) <input type="checkbox"/> Other: ____ |

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6, 8-19, 21-37, 39-49, 51, 52 and 57 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Rourke et al (U.S. 6,986,018 B2)

3. As per claims 1, 15, 20, 23, 26, 31, 32, 34, 37, 41, 42 & 49 O'Rourke disclosed a network proxy caching device (col.1, lines 27-31) to operate within a defined cache hierarchy on a network, the caching device comprising: a cache to store content from an origin server on the network; an application to receive a request for content from a client via the network, and to forward the request on the network based on a set of forwarding rules in the event of a cache miss (col.5, lines 43-56); a user interface to enable a user to specify and modify the set of forwarding rules (col.2, lines 23-33 & col.2, lines 51-67); a rule encoder to encode into a uniform syntax forwarding rules specified by the user (col.2, lines 23-57); a rules database to store the encoded forwarding rules (col.4, lines 10-22); a rule evaluator to evaluate the set of forwarding rules sequentially in response to the cache miss, to identify a rule in the set of forwarding rules which applies to the

request, by identifying a correspondence between a variable in the request and a variable in the rule, the rule specifying a host within the cache hierarchy as a forwarding destination for the request; and a rule engine to determine an availability of the host and to select the host as said forwarding destination for the request if the host is available, the rule engine further to indicate the host to the application layer if the host is available to cause the application layer to attempt to establish a connection with the host, such that the application layer forwards the request to the host upon successfully establishing the connection (col.8, lines 5-23, lines 51-67, col.9 & col.10, lines 1-4) wherein if the application layer is unable to forward the request according to the rule, the rule evaluator resumes evaluating the set of forwarding rules to identify another rule corresponding to the request (col.8, lines 5-23).

4. As per claims 2, 16, 40 & 51 O'Rourke disclosed a device as recited in claim 1, wherein the user may specify one or more of the forwarding rules to indicate a manner of forwarding the request within the forwarding hierarchy (col.4, lines 10-22 & col.8, lines 5-23).

5. As per claims 3, 17, 24, 35 & 52 O'Rourke disclosed a device as recited in claim 2, wherein the forwarding hierarchy is a cache hierarchy (col.5, lines 43-56).

6. As per claims 4, 18, 19, 25 & 36 O'Rourke disclosed a device as recited in claim 3, further comprising a cache to store content requestable by a client on the network,

wherein the request processing unit forwards the request only in the event of a cache miss, wherein the request is a request for content on the network ((col.4, lines 10-22 & col.8, lines 5-23).

7. As per claims 6, 21, 27 & 28 O'Rourke disclosed an intermediary network node as recited in claim 26, wherein the rule evaluator identifies the rule, which applies to the request by determining that a condition in the rule is satisfied ((col.4, lines 10-22 & col.8, lines 5-23).

8. As per claims 39 O'Rourke disclosed a method as recited in claim 37, further comprising, if said attempting to establish the connection is unsuccessful: determining whether a second available host is indicated in the rule, and if so, attempting to establish a connection to the second available host; and forwarding the request to the second available host (col.4, lines 10-22 & col.8, lines 5-23).

9. As per claims 8, 33, 29 & 53 O'Rourke disclosed a device as recited in claim 1, wherein said rule comprises a plurality of destinations, and wherein the rule engine selects a destination from among the plurality of destinations as a forwarding destination for the request, based on at least one delivery factor included in the rule ((col.4, lines 10-22 & col.8, lines 5-23).

10. As per claim 9 O'Rourke disclosed a device as recited in claim 8, wherein the at least one delivery factor comprises a specified distribution method for the request (col.4, lines 10-22 & col.8, lines 5-23).

11. As per claim 10 O'Rourke disclosed a device as recited in claim 8, wherein the at least one delivery factor comprises an indication of a current load on at least one of the destinations (col.423-33).

12. As per claim 11 O'Rourke disclosed a device as recited in claim 8, wherein the at least one delivery factor comprises a weighting of the plurality of destinations indicating a preferred distribution of forwarding requests between the plurality of destinations (col.4, lines 10-22 & col.8, lines 5-23).

13. As per claims 12, 13, 14, 16, 22, 30 & 43 O'Rourke disclosed a device as recited in claim 49, wherein the user interface is further to enable the user to modify the set of forwarding rules, to specify a sequence in which the rules of the set of forwarding rules are evaluated, to selectively enable or disable a default forwarding rule (col.4, lines 10-22 & col.8, lines 5-23).

14. As per claims 44, 46, 47 & 48 O'Rourke disclosed a method as recited in claim 34, further comprising, prior to said forwarding the request: acquiring information about the forwarding destination, the information being indicative of a responsiveness of the

forwarding destination; computing a timeout period based on the information indicative of the responsiveness of the following destination; and using the computed timeout period, in the request, in attempting to establish a connection with the forwarding destination (col.4, lines 10-22 & col.8, lines 5-23).

Response to Arguments

1. Applicant's arguments filed 10/15/2007 have been fully considered but they are not persuasive.
2. Applicant on page 17, line4 argued that O'Rourke does not mention the possibility that the evaluation of a set of cache policies or any other type of rule can be suspended and then resumed after occurrence of a condition, much less on the specific condition that the request is unable to be forwarded.
3. As to applicant's argument, examiner points out that in O'Rourke "policies" are basically "rules" which dictate a number of courses of action in various conditions:
 - (i) O'Rourke mentions the presence of cache policies on col.7, lines 45-65.

The cache policies are typically defined based on an administrator's knowledge of the origin servers, cache servers, clients, networks and other components in the environment in which the cache server is located. Alternatively, the cache policies may have been set by a manufacturer that customizes the cache server and sells the cache server to an end user.

The cache policies may also be based on the administrator's knowledge and/or expectations with respect to, for example, the type of content requests received by the cache server, the volume of requests and the timing of the requests.

Other decisions the cache policies may make include the types of content that should be cached on the cache server. For example, the cache policy may dictate that the cache server can only cache content from specific origin servers (e.g., origin servers owned by a particular company or organization). Additionally, the cache policy may state that the cache server can only cache small pieces of content (that are inexpensive to copy) or only large pieces of content. The cache policy may also limit the total amount of cached content that the cache server can store at any particular time.

(ii) O'Rourke discloses the presence of the evaluation of a set of cache policies and the suspension and resumption of a rule in certain conditions on col.8, lines 5-23.

- 5 Another group of cache policies handle cache misses (i.e., the cache server does not contain the requested content). When a cache miss occurs, the cache policy determines how to deliver the requested content to the client. The policy may cause the client to wait while the cache server downloads a
- 10 copy of the requested content, the client may be redirected to a different cache server, or the client may be redirected to the origin server to retrieve the requested content. When a cache miss occurs, the cache policies will determine whether a copy of the requested content should be cached by the
- 15 cache server to satisfy future requests for the same content by other clients. If the cache policy determines that the content should be cached by the cache server, then another cache policy may determine whether any of the existing cached content should be deleted to release storage space for
- 20 the new content. If existing cached content is to be deleted, the cache policy will determine which content should be deleted (e.g., the oldest cached content or the least frequently requested content).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


AB

~~SUPREMAN FLYNN~~
~~SPRINT PATENT EXAMINER~~